

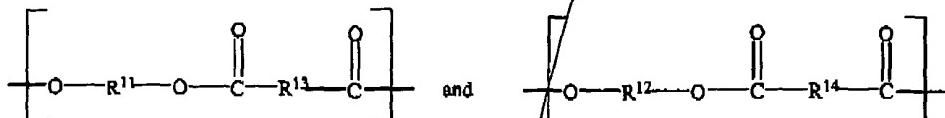
ATTORNEY DOCKET NO.: 05015.0365U1
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IN THE CLAIMS

Please cancel claims 6, 19 and 23, without prejudice.

Please amend claims 1, 7, 10 and 22 as follows:

1. (Amended) A method for slowing the degradation rate of a biodegradable polymer composition wherein the method comprises:
- introducing a phenol-containing compound comprising terpene-phenol resin into a biodegradable polymer or biodegradable polymer composition in an amount sufficient to slow the degradation rate of the biodegradable polymer or biodegradable polymer composition; and
 - mixing the phenol-containing compound with the biodegradable polymer or biodegradable polymer composition;
- wherein the biodegradable polymer or biodegradable polymer composition comprises one or more of:
- an aliphatic-aromatic copolyester having repeat units of the following structures:



wherein

- R¹¹ and R¹² are the same or different, and are residues of one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 2,2-dimethyl-1,3-propanediol, 1,3-butanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 2,2,4-trimethyl-1,6-hexanediol, thiodiethanol, 1,3-cyclohexanedimethanol, 1,4-

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cyclohexanedimethanol, 2,2,4,4-tetramethyl-1,3-cyclobutanediol, triethylene glycol, or tetraethylene glycol;

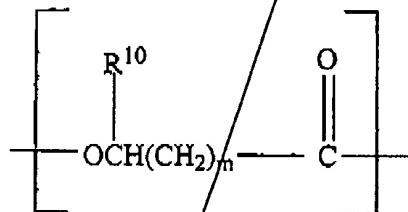
(ii) R¹¹ and R¹² are 100% of the diol components in the copolyester;

(iii) R¹³ is absent or is selected from one or more of the groups consisting of C₁ - C₁₂ alkylene or oxyalkylene; C₁ - C₁₂ alkylene or oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆ - C₁₀ aryl, and C₁ - C₄ alkoxy; C₅ - C₁₀ cycloalkylene; and C₅ - C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆ - C₁₀ aryl, and C₁ - C₄ alkoxy; and

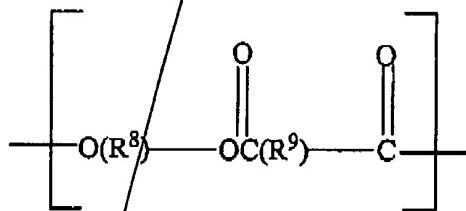
(iv) R¹⁴ is selected from one or more of the groups consisting of C₆ - C₁₀ aryl, and C₆ - C₁₀ aryl substituted with one to four substituents independently selected from the group consisting of halo, C₁ - C₄ alkyl, and C₁ - C₄ alkoxy;

2. an aliphatic polyester having repeat units of one or more of the following structures:

*sub
B17*



or



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wherein m is an integer of from 0 to 10, and R¹⁰ is selected from the group consisting of hydrogen; C₁-C₁₂ alkyl; C₁-C₁₂ alkyl substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkyl; and C₅-C₁₀ cycloalkyl substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy,
wherein R⁸ is selected from the group consisting of C₂-C₁₂ alkylene or C₂-C₁₂ oxyalkylene; C₂-C₁₂ alkylene or C₂-C₁₂ oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkylene; C₅-C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy, and

A
Sub
B17
wherein R⁹ is absent or is selected from one or more of the group consisting of C₁-C₁₂ alkylene or oxyalkylene; C₁-C₁₂ alkylene or oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkylene; and C₅-C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; and

3) a C₁-C₁₀ cellulose ester having a DS equal to or less than about 2.5.

- A2*
Sub
B27
7. (Amended) The method of claim 1 wherein the biodegradable polymer or biodegradable polymer composition comprises the aliphatic-aromatic copolyester and wherein R¹¹ and R¹² are the same or different, and are selected from the group consisting of residues of one or more of glycol, propylene glycol, 1,3-propanediol, 1,3-butanediol, and 1,4-butanediol, R¹³ is selected from the group consisting of malonic acid, succinic acid, glutaric acid, adipic acid, pimelic acid,

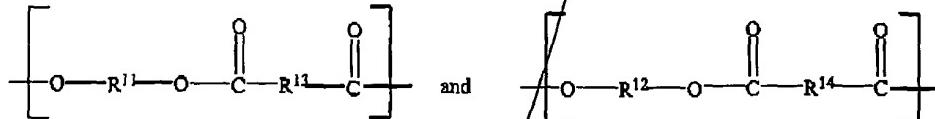
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2,2-dimethyl glutaric acid, diglycolic acid, and an ester forming derivative thereof, and R¹⁴ is selected from the group consisting of one or more of 1,4-terephthalic acid, 1,3-terephthalic acid, 2,6-naphthoic acid, 1,5-naphthoic acid, and an ester forming derivative thereof.

10. (Amended) A method for slowing the degradation rate of a biodegradable polymer or polymer composition, wherein the method comprises:
- introducing a phenol-containing compound into a biodegradable polymer or polymer composition in an amount sufficient to slow the degradation rate of the biodegradable polymer or polymer composition; and
 - mixing the phenol-containing compound with the biodegradable polymer or polymer composition, wherein the biodegradable polymer comprises one or more of the following:

a3

- an aliphatic-aromatic copolyester having repeat units of the following structures:

*SUB
B3*

wherein

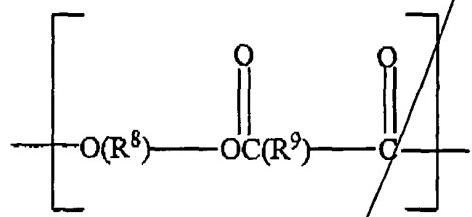
- R¹¹ and R¹² are the same or different, and are residues of one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 2,2-dimethyl-1,3-propanediol, 1,3-butanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 2,2,4-trimethyl-1,6-hexanediol, thiodiethanol, 1,3-cyclohexanedimethanol, 1,4-cyclohexanedimethanol, 2,2,4,4-tetramethyl-1,3-cyclobutanediol, triethylene glycol, or tetraethylene glycol;
- R¹¹ and R¹² are 100% of the diol components in the copolyester;
- R¹³ is absent or is selected from one or more of the groups consisting of C₁ - C₂ alkylene or oxyalkylene; C₁ - C₁₂ alkylene or

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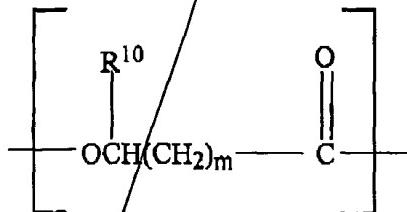
oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆ - C₁₀ aryl, and C₁ - C₄ alkoxy; C₅ - C₁₀ cycloalkylene; and C₅ - C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆ - C₁₀ aryl, and C₁ - C₄ alkoxy; and

(iv) R¹⁴ is selected from one or more of the groups consisting of C₆ - C₁₀ aryl, and C₆ - C₁₀ aryl substituted with one to four substituents independently selected from the group consisting of halo, C₁ - C₄ alkyl, and C₁ - C₄ alkoxy;

- 2) an aliphatic polyester having repeat units of one or more of the following structures:

*A3**SUB
B3/*

or



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wherein m is an integer of from 0 to 10, and R¹⁰ is selected from the group consisting of hydrogen; C₁-C₁₂ alkyl; C₁-C₁₂ alkyl substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkyl; and C₅-C₁₀ cycloalkyl substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy,
wherein R⁸ is selected from the group consisting of C₂-C₁₂ alkylene or C₂-C₁₂ oxyalkylene; C₂-C₁₂ alkylene or C₂-C₁₂ oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkylene; C₅-C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy,
and

wherein R⁹ is absent or is selected from one or more of the group consisting of C₁-C₁₂ alkylene or oxyalkylene; C₁-C₁₂ alkylene or oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkylene; and C₅-C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; and

3) C₁-C₁₀ cellulose ester having a DS equal to or less than about 2.5.

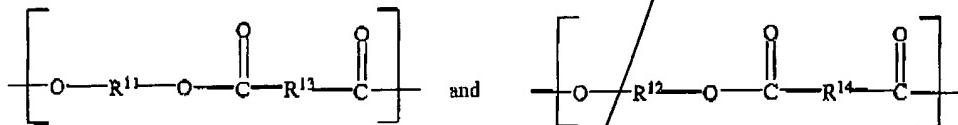
22. (Amended) A biodegradable polymer composition comprising:

- a. a phenol-containing compound comprising terpene-phenol resin incorporated in the biodegradable polymer or biodegradable polymer-second material composition, the phenol-containing compound being present at an amount sufficient to slow the degradation rate of the biodegradable polymer or biodegradable polymer second-material composition; and

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- b. a biodegradable polymer or biodegradable polymer-second material composition comprising one or more of the following:

1. an aliphatic-aromatic copolyester having repeat units of the following structures:

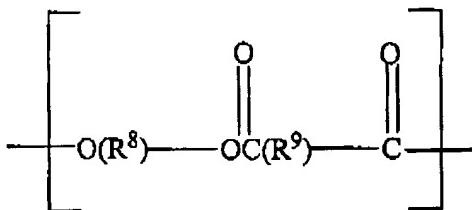


wherein

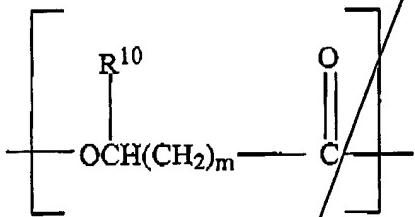
- (i) R^{11} and R^{12} are the same or different, and are residues of one or more of diethylene glycol, propylene glycol, 1,3-propanediol, 2,2-dimethyl-1,3-propanediol, 1,3-butanediol, 1,4-butanediol, 1,5-pentanediol, 1,6-hexanediol, 2,2,4-trimethyl-1,6-hexanediol, thiidiethanol, 1,3-cyclohexanedimethanol, 1,4-cyclohexanedimethanol, 2,2,4,4-tetramethyl-1,3-cyclobutanediol, triethylene glycol, or tetraethylene glycol;
- (ii) R^{11} and R^{12} are 100% of the diol components in the copolyester;
- (iii) R^{13} is absent or is selected from one or more of the groups consisting of $C_1 - C_{12}$ alkylene or oxyalkylene; $C_1 - C_{12}$ alkylene or oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, $C_6 - C_{10}$ aryl, and $C_1 - C_4$ alkoxy; $C_5 - C_{10}$ cycloalkylene; and $C_5 - C_{10}$ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, $C_6 - C_{10}$ aryl, and $C_1 - C_4$ alkoxy; and
- (iv) R^{14} is selected from one or more of the groups consisting of $C_6 - C_{10}$ aryl, and $C_6 - C_{10}$ aryl substituted with one to four substituents independently selected from the group consisting of halo, $C_1 - C_4$ alkyl, and $C_1 - C_4$ alkoxy;

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- 2) an aliphatic polyester having repeat units of one or more of the following structures:



or



wherein m is an integer of from 0 to 10, and R¹⁰ is selected from the group consisting of hydrogen; C₁-C₁₂ alkyl; C₁-C₁₂ alkyl substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkyl; and C₅-C₁₀ cycloalkyl substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy,
 wherein R⁸ is selected from the group consisting of C₂-C₁₂ alkylene or C₂-C₁₂ oxyalkylene; C₂-C₁₂ alkylene or C₂-C₁₂ oxyalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy; C₅-C₁₀ cycloalkylene; C₅-C₁₀ cycloalkylene substituted with one to four substituents independently selected from the group consisting of halo, C₆-C₁₀ aryl, and C₁-C₄ alkoxy,
 and